

HYDRAULIC CONTROL ARRANGEMENT FOR A MOBILE OPERATING MACHINE

Abstract of the Disclosure

A tractor-mounted front end loader includes lift boom having a tool, disclosed as a bucket, pivotally mounted to one end of the boom for selected movement by one or more hydraulic adjustment cylinders. A safety valve is associated with one of the pressure chambers of each adjustment cylinder to prevent unintended lowering of the tool in the event a supply-return hose extending between a direction control valve and the adjustment cylinder should rupture. Also connected to this pressure chamber of each adjustment cylinder is an accumulator for providing a damping action. The connection between the pressure chamber and the accumulator is made by rigid tubing, and in one disclosed embodiment, includes a remotely operable on/off valve for selectively coupling the accumulator to the pressure chamber.